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ACCOUNT NO. 23-0975

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of :  
Natsuki SAITO et al. : **Mail Stop: PCT**  
Serial No. 10/587,241 : Attorney Docket No. 2006\_1146A  
Filed July 26, 2006 :  
VOICE SYNTHESIS DEVICE  
[Corresponding to PCT/JP2005/000505  
Filed January 17, 2005]

**SUBMISSION OF ENGLISH VERSION OF INTERNATIONAL  
PRELIMINARY REPORT ON PATENTABILITY**


Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Submitted herewith for consideration by the Examiner is an English version of the  
International Preliminary Report on Patentability.

Respectfully submitted,

Natsuki SAITO et al.

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January 3, 2007

From the INTERNATIONAL BUREAU

**PCT**

NOTIFICATION OF TRANSMITTAL  
OF COPIES OF TRANSLATION  
OF THE INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY  
(CHAPTER I OR CHAPTER II  
OF THE PATENT COOPERATION TREATY)  
(PCT Rules 44bis.3(c) and 72.2)

To:

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05.11.2006

|   |  |
|---|--|
| Date of mailing (day/month/year)<br>09 November 2006 (09.11.2006) | <b>IMPORTANT NOTIFICATION</b>  |
| Applicant's or agent's file reference<br>P36725-P0                |  |
| International application No.<br>PCT/JP2005/000505                | International filing date (day/month/year)<br>17 January 2005 (17.01.2005) |
| Applicant<br>MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD. et al       |  |

## 1. Transmittal of the translation to the applicant.

☐

The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter I).

☒

The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter II).

## 2. Transmittal of the copy of the translation to the designated or elected Offices.

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following designated or elected Offices requiring such translation:

EP, KR

The following designated or elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

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## 3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability (Chapter II).

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned within the applicable time limit (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.

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**TRANSLATION**

**PATENT COOPERATION TREATY**

**PCT**

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

|  |   |   |
|--|---|---|
| Applicant's or agent's file reference<br><b>P36725-P0</b>  | FOR FURTHER ACTION  | See Form PCT/IPEA/416                               |
| International application No.<br><b>PCT/JP2005/000505</b>  | International filing date (day/month/year)<br><b>17.01.2005</b> | Priority date (day/month/year)<br><b>27.01.2004</b> |
| International Patent Classification (IPC) or national classification and IPC<br><b>G10L13/06</b> |   |   |
| Applicant<br><b>MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.</b>                                     |   |   |

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 4 sheets, including this cover sheet.

3. This report is also accompanied by ANNEXES, comprising:

a. ☒ (sent to the applicant and to the International Bureau) a total of 9 sheets, as follows:

☒ sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).

☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.

b. ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) \_\_\_\_\_, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

☒ Box No. I Basis of the report

☐ Box No. II Priority

☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

☐ Box No. IV Lack of unity of invention

☒ Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability: citations and explanations supporting such statement

☐ Box No. VI Certain documents cited

☐ Box No. VII Certain defects in the international application

☐ Box No. VIII Certain observations on the international application

|   |                                   |
|---|-----------------------------------|
| Date of submission of the demand        | Date of completion of this report |
| Name and mailing address of the IPEA/JP | Authorized officer                |
| Facsimile No.                           | Telephone No.                     |

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2005/000505

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language \_\_\_\_\_ which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1, 3-25 \_\_\_\_\_ as originally filed/furnished
- pages\* 2-2/2 \_\_\_\_\_ received by this Authority on 10.08.2005
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☒ the claims:
- nos. \_\_\_\_\_ as originally filed/furnished
- nos.\* \_\_\_\_\_ as amended (together with any statement) under Article 19
- nos.\* 1-7, 11, 18 \_\_\_\_\_ received by this Authority on 10.08.2005
- nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☒ the drawings:
- sheets fig. 1-16 \_\_\_\_\_ as originally filed/furnished
- sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☒ The amendments have resulted in the cancellation of:
- ☐ the description, pages \_\_\_\_\_
- ☒ the claims, nos. 8-10, 12-17 \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2005/000505

**Box No. V** Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

|                               |        |             |     |
|-------------------------------|--------|-------------|-----|
| Novelty (N)                   | Claims | 1-7, 11, 18 | YES |
|                               | Claims |             | NO  |
| Inventive step (IS)           | Claims | 1-7, 11, 18 | YES |
|                               | Claims |             | NO  |
| Industrial applicability (IA) | Claims | 1-7, 11, 18 | YES |
|                               | Claims |             | NO  |

## 2. Citations and explanations (Rule 70.7)

Document 1: JP 9-244693 A (NTT Data Communications Systems Corp.), 19 September 1997, entire text and fig 1 to 10 (Family: none)

Document 2: JP 2002-351489 A (Namco Ltd.), 06 December 2002, entire text and fig. 1 to 24 (Family: none)

Document 3: JP 4-158397 A (Kabushiki Kaisha ATR Jido Honyaku Denwa Kenkyusho), 01 June 1992, entire text and fig. 1 to 3 (Family: none)

The specific configuration of the morphing means (the morphing step) in the inventions set forth in claims 1 to 7, 11 and 18 (i.e., the feature wherein fixed points that express the vocal quality of the stored sets of phonetic information are arranged in a coordinate system with N dimensions for display; the feature wherein a plurality of set points are arranged in the aforementioned coordinate system for display based on operations that are carried out by a user; the feature wherein among the plurality of sets of synthesized voice information that contribute to the morphing process, the portion of the information which changes over time is derived and indicated based on moving points, which move

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2005/000505

Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement

between the aforementioned plurality of established points in an continuous manner over time, and the arrangement of the aforementioned fixed points; and the feature wherein intermediate synthesized voice signals, which correspond to the characters that are included within the text data and express a synthesized voice with an intermediate vocal quality that falls somewhere between the plurality of vocal qualities, are generated using only the indicated portion of the plurality of generated sets of synthesized voice information which changes over time) is not disclosed or suggested in any of the documents that are cited in the international search report, including documents 1 to 3, and it would not have been easy for a person skilled in the art to conceive of the configuration in question.